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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,055	04/14/2004	William T. Newport	ROC920030403US1	6098
46797 7590 09/06/2007 IBM CORPORATION, INTELLECTUAL PROPERTY LAW DEPT 917, BLDG. 006-1 3605 HIGHWAY 52 NORTH ROCHESTER, MN 55901-7829			EXAMINER MERCHANT, SHAHID R	
			ART UNIT 3694	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/824,055

Applicant(s)

NEWPORT, WILLIAM T.

Examiner

Shahid R. Merchant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Status of the Claims*

1. This action is in response to the amendment filed on July 27, 2007. Claims 1-20 are pending. Claims 1, 2, 5, 6, 12-14 and 17-20 have been amended.

### *Response to Arguments*

2. Applicant's arguments, see page 6, filed July 27, 2007, with respect to claims 2, 5, 13 and 14 have been fully considered and are persuasive. The claim objection of claims 2, 5, 13 and 14 has been withdrawn.

3. Applicant's arguments, see page 6, filed July 27, 2007, with respect to claims 1, 6, 12 and 17 have been fully considered and are persuasive. The 35 U.S.C. 112 rejection of claims 2, 5, 13 and 14 has been withdrawn.

4. Applicant's arguments filed July 27, 2007 have been fully considered but they are not persuasive. Applicant argues that Serkin fails to teach a computer-implemented method. Examiner disagree's. Serkin recites in the abstract, "A system in an electronic securities market... plurality of securities to one or more securities processors in the system... sends the received security order to the securities processor to which the specific security is assigned." In addition, Figure 1 shows the computerized trading system, item 16 and item 18. Serkin discloses in paragraph 31, "Referring to FIG. 1, there is shown an order routing system 10 that directs received orders, for buying or selling securities 12, to a securities processor (e.g., securities processor 14) that is assigned to a specific security. Order routing system 10 is incorporated into and part of

a computerized trading system 16 that trades securities, including the specific security that is the subject of received order 12. The securities processor processes the security order and effectuates the trading of the security. By assigning certain securities to certain securities processors, a single securities processor is not required to process all of the orders handled by the computerized trading system 16. Accordingly, load balancing of the individual securities processors within the system can be controlled and the overall efficiency and throughput of the system is enhanced." It is evident that Serkin discloses a computer-implemented method for dynamically scaling order processing in a securities exchange that includes monitoring a volume of orders related to a security received at a securities exchange and balancing the order volume among the books.

Applicant argues that Serkin fails to teach the use of a program to monitor the volume of orders related to the security. Serkin teaches the use of a computer program in paragraph 33. Serkin recites, "The instruction sets and subroutines of order routing system 10 and securities processor 14 are typically stored on a storage device 28 connected to server 18. Additionally, computerized trading system 16 stores all information relating to securities trades on storage device 28. Storage device 28 can be a hard disk drive, a tape drive, an optical drive, a RAID array, a random access memory (RAM), or a read-only memory (ROM), for example."

Applicant argues that Serkin fails to teach an executable component configured to allocate resources by monitoring the volume of orders related to the security. Serkin teaches the use of a computer system in abstract, paragraphs 31, 32, 34, 35 and Figures 1, 2. Serkins system is a computer based system.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-20 rejected under 35 U.S.C. 102(e) as being anticipated by Serkin et al, U.S. Patent Application Publication 2003/0229567 (see PTO-892, Ref. A).

3. As per claim 1, Serkin teaches a computer-implemented method for dynamically scaling order processing in a securities exchange, comprising:

maintaining one or more books for a security at the securities exchange, wherein the one or more books each list orders related to the security (see paragraph 31);

monitoring a volume of orders related to the security received at the securities exchange (see paragraph 47);

varying the number of books maintained for the security based on the monitored volume of orders (see paragraph 47);

distributing orders related to the security and received at the securities exchange among the books maintained for the security (see paragraphs 45-47); and

balancing the monitored order volume among the books (see abstract).

4. As per claim 2, Serkin teaches the method of claim 1 as described above. Serkin further teaches wherein varying the number of books maintained for the security based on the monitored volume of orders comprises:

upon determining if the monitored volume of orders related to the security exceeds a maximum threshold value (see paragraph 47);

opening a new book for the security (see paragraph 47).

5. As per claim 3, Serkin teaches the method of claim 2 as described above. Serkin further teaches wherein opening a new book for the security comprises creating a logical partition (see paragraph 47).

6. As per claim 4, Serkin teaches the method of claim 2 as described above. Serkin further teaches wherein opening a new book for the security comprises allocating one or more processors to the new book (see paragraphs 46-47).

7. As per claim 5, Serkin teaches the method of claim 2 as described above. Serkin further teaches wherein varying the number of books maintained for the security based on the monitored volume of orders further comprises:

upon determining if the monitored volume of orders related to the security falls below a minimum threshold value (see paragraphs 46-47);

closing one or more books maintained for the security (see paragraphs 46-47).

8. As per claim 6, Serkin teaches the method of claim 5 as described above. Serkin further teaches wherein the maximum threshold value and the minimum threshold values are different (see paragraph 47).

9. As per claim 7, Serkin teaches the method of claim 1 as described above. Serkin further teaches wherein maintaining one or more books for the security at the exchange comprises maintaining at least one book for the security on at least two different servers (see paragraph 46).

10. As per claim 8, Serkin teaches the method of claim 1 as described above. Serkin further teaches wherein monitoring the volume of orders related to the security received at the exchange comprises dividing the total volume of orders related to the security received at the exchange by the number of books maintained for the security (see paragraphs 31 and 45-47).

11. As per claim 9, Serkin teaches the method of claim 1 as described above. Serkin further teaches further comprising publishing the top of each book maintained for the security (see paragraphs 3, 5, 36, 37 and 42).

12. As per claim 10, Serkin teaches the method of claim 9 as described above. Serkin further teaches further comprising matching an order listed on one of the books

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maintained for the security with one of the other books maintained for the security (see paragraphs 40, 41 and 43).

13. As per claim 11, Serkin teaches the method of claim 9 as described above. Serkin further teaches further comprising matching an order listed on one of the books maintained for the security with a book maintained for the security at another exchange (see paragraph 32).

14. Claims 12 and 17 are in parallel with claim 1 and are rejected for at least the same reason as set forth above (see also paragraphs 67 and 68).

15. Claims 13 and 14 are in parallel with claim 2 and are rejected for at least the same reason as set forth above.

16. As per claim 15, Serkin teaches the computer-readable of claim 12 as described above. Serkin further teaches comprising providing an interface allowing an administrator to specify the maximum threshold value (see paragraph 47).

17. Claim 16 is in parallel with claim 8 and is rejected for at least the same reason as set forth above.



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18. As per claim 18, Serkin teaches the computer system of claim 17 as described above. Serkin further teaches wherein the one or more books maintained for the security at the exchange comprises:

at least a first book for the security maintained on a first server; and

at least a second book for the security maintained on a second server (see paragraph 46).

19. As per claim 19, Serkin teaches the computer system of claim 17 as described above. Serkin further teaches wherein the one or more books are maintained on a computer system having multiple logical partitions (see paragraph 47).

20. As per claim 20, Serkin teaches the computer system of claim 19 as described above. Serkin further teaches wherein each book is assigned to a different logical partition (see paragraph 47).

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***Conclusion***

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shahid R. Merchant whose telephone number is 571-270-1360. The examiner can normally be reached on First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P. Trammel can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SRM

  
JELLA COLBERT  
PRIMARY EXAMINER